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REMARKS**Summary of Claim Amendments**

For ease of further prosecution, Claims 1-20, which were previously withdrawn, have been cancelled without prejudice, Applicants reserving their right to file one or more separate divisional applications to these claims.

Claim 21 has been amended to recite that the polymer finish consists of a combination of a first urethane polymer having an elongation at break of at least 500% and a second urethane polymer having an elongation at break of less than 500%. Claim 28 has been amended to depend from Claim 27. Thus, the pending Claims under consideration are Claims 21-31.

Rejection under 35 USC 103

Claims 21, 23, and 25-31 are rejected under 35 USC 103(a) as being unpatentable over US Patent 5,981,407 to MATSUMOTO et al. in view of US Patent 6,001,906 to GOLUMBIC.

The argument presented by the Office in making this rejection is essentially as follows:

MATSUMOTO teaches a flame retardant fabric comprising a halogen-containing polyester fiber. The halogen-containing fiber may comprises a phosphorous compound, such as tris(2,3-dichloropropyl) phosphate. The applied fabric is woven. MATSUMOTO fail to teach the use of a protective film for the fabric.

GOLUMBIC teaches a coating composition comprising polyurethane to produce a tough, durable, protective film firmly bonded to the surface. The coating may comprise a combination of polyurethane having an elongation of approximately 400% mixed with a relatively soft polyurethane having an elongation of approximately 700% and may be used for clothing. The coating may be

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transparent. The polyurethanes of the applied invention are aliphatic polyurethanes. The SPENSOL® polymers used by the patentee are aliphatic polyester polyurethanes.

Since MATSUMOTO and GOLUMBIC are from the same field of endeavor (i.e., protective fabrics), the purpose disclosed by GOLUMBIC would have been recognized in the pertinent art of MATSUMOTO.

It would have been obvious to modify the invention of MATSUMOTO with the motivation of providing the fabric with impact and abrasion resistance, toughness, and outstanding stain and chemical resistance, as disclosed by GOLUMBIC.

The Office also suggest that the add-on levels of the coating, the ability of the coated fabric to pass the NFPA Small Scale 701 Vertical Flame Test (1989), and the hand of the coated textile are also obvious, based on the inherent teachings of MATSUMOTO and GOLUMBIC.

From Applicant's understanding, MATSUMOTO is directed to a flame retardant fabric made from three different fiber types: a halogen-containing fiber, a polyvinyl alcohol fiber, and a common polyester fiber. The woven fabrics taught by MATSUMOTO have excellent heat resistance and are suitable for transfer printing. The halogen-containing fiber provides flame retardance to the fabric. MATSUMOTO does not teach or suggest the use of polymer coatings in conjunction with their flame retardant fabric.

As best understood, GOLUMBIC is directed to a urethane-wax coating composition for forming "a tough, durable, protective film bonded firmly to the surface" (Abstract). The products that may protected include materials such as "leather, vinyl polymers, flexible and semi-rigid plastics, rubber, polycarbonate, reaction-injection molding compound,

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thermoplastic polyurethane, acrylonitrile-butadiene-styrene, wood, aluminum, and galvanized metal" (Col. 2, lines 38-43). The coatings include at least a polyurethane resin, a wax, a flow control agent (surfactant), a defoamer, a coloring agent, and a rheology control compound.

The Office has suggested that the GOLUMBIC reference is directed to the same field of endeavor as the MATSUMOTO reference, that being to the area of protective fabrics. However, Applicants note that each reference imparts a different type of protection to their respective fabrics and imparts this protection in different ways. MATSUMOTO teaches imparting flame retardance by using flame retardant fibers. GOLUMBIC teaches imparting abrasion resistance by applying a durable urethane-wax coating.

MPEP 2143.01 states, in part:

"Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art."

Applicant submits that the combination of MATSUMOTO and GOLUMBIC fails to satisfy this standard. Although the references are directed to the same broad field of endeavor, there is no logical reason to make the combination suggested by the Office. MATSUMOTO teaches a fabric is flame retardant due to chosen fiber types and provides no teaching of the use of a polymeric coating. GOLUMBIC teaches a coating that includes a urethane and a wax, but does not specifically mention the addition of flame retardant additives or flame retardant fibers.

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Accordingly, there is no apparent reason to make the combination of MATSUMOTO with GOLUMBIC, when the references themselves seek to impart different properties in two distinctly different methods. When each reference seeks to solve a different problem, Applicant submits that one of skill in the art would not be motivated to combine the references as suggested by the Office.

In evaluating the patentability of a claim against the prior art, the Office must consider all of the limitations of the claims. (See MPEP 2143.03, which states, in part: "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).)

Claim 21 has been amended to recite that the polymer finish consists of a first urethane and a second urethane. The GOLUMBIC finish comprises urethane(s), a wax, a dispersing agent, a leveling agent, and a defoaming agent. GOLUMBIC fails to teach a finish having only two urethane compounds. MATSUMOTO fails to teach any coating compositions whatsoever and, therefore, cannot overcome this deficiency in GOLUMBIC.

Accordingly, Applicant believes that no *prima facie* case of obviousness exists. Applicant respectfully requests the withdrawal of such rejection.

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Claims 22 and 24 are rejected under 35 USC 103(a) as being unpatentable over US Patent 5,981,407 to MATSUMOTO et al. in view of US Patent 6,001,906 to GOLUMBIC, as applied to Claim 21 above, and further in view of US Patent 5,521,273 to YILGÖR et al.

The argument presented by the Office in making this rejection is essentially as follows:

MATSUMOTO discloses the claimed invention, except that they use woven fabrics, instead of knitted or nonwoven fabrics. YILGÖR shows that knitted and nonwoven fabrics are equivalent structures in the art. Therefore, because these materials are art-recognized equivalents, one of ordinary skill in the art would have found it obvious to substitute woven fabric for nonwoven or knitted fabrics.

The deficiencies of the combination of MATSUMOTO and GOLUMBIC are discussed above. The introduction of YILGÖR and its teachings of fabric constructions do not overcome these previous deficiencies, including providing any motivation for combining the reference or any reasonable likelihood of success in making the proposed combination.

Specifically, YILGÖR teaches the production of a water vapor-permeable, waterproof two layer coating system having a first breathable polyurethane adhesive and a second breathable polyurethaneurea top coat (see, for example, Col. 5, line 66 – Col. 6, line 2). Both the adhesive layer and the top coat material are described as having an elongation at break of "better than 500-600%" (Col. 6, lines 26-27). As discussed above, GOLUMBIC teaches a coating made from a combination of a high elongation urethane, a low elongation urethane, a wax, and other materials. Thus, when the YILGÖR reference is considered as a whole and not only for the limited teachings used by the

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Office in making this combination, the combination of GOLUMBIC and YILGÖR renders the references unsuitable for their intended purposes.

MPEP 2143.01, paragraph (V) provides, in part:

If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)

For these reasons, Applicant submits that the proposed combination of YILGÖR with MATSUMOTO and GOLUMBIC fails to provide a *prima facie* case of obviousness against Claims 22 and 24. Accordingly, Applicant respectfully requests the withdrawal of such rejection.

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CONCLUSION

In view of the previous remarks, Applicant respectfully submits that this application is now in condition for allowance. Entry of this Amendment, reconsideration of the subject matter of Claims 21-31 in light of the above Remarks, and issuance of a formal Notice of Allowability of such claims is courteously solicited.

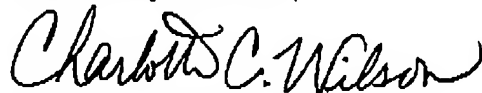
Should any issues remain after consideration of these Remarks, the Examiner is invited and encouraged to telephone the undersigned in the hope that any such issue may be resolved promptly and satisfactorily.

This response is accompanied by a Petition for Extension of Time (one month). In the event that there are additional fees associated with the submission of these papers (including extension of time fees), authorization is hereby provided to withdraw such fees from Deposit Account No. 04-0500.

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Legal Department, M-495
Post Office Box 1926
Spartanburg, SC 29304

Respectfully submitted,



Charlotte C. Wilson
Agent for Applicants
Registration No. 45,224
Tel. (864) 503-2194
Fax (864) 503-1999